

HAFB 97

State of New Mexico

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 5, 1997

Howard E. Moffitt
Deputy Base Civil Engineer
49 CES\CEV
550 Tabosa Ave
Holloman Air Force Base, N.M. 88330-8458

**SUBJECT: NOTICE OF DEFICIENCY: VOLUNTARY CORRECTIVE MEASURES WORK
PLAN FOR SWMU 136, BUILDING 1119 WASHRACK DRAINAGE PIT.
EPA I.D. Number NM6572124422**

Dear Mr. Moffitt:

The Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department (NMED) has reviewed for administrative completeness and technical adequacy, the Holloman Air Force Base (HAFB) August 1996 Work Plan for SWMU 136, Building 1119 Washrack Drainage Pit Soil Venting System, as required under the New Mexico Hazardous Waste Management Regulations 20 NMAC 4.1 (Revised November 1, 1995).

After reviewing the Work Plan, the NMED has found it to be administratively incomplete and technically inadequate. The enclosed Attachment A lists the additional information that HAFB must submit to HRMB before the Work Plan can be considered for approval. The information requested in Attachment A must be submitted to NMED within thirty (30) calendar days from the date you receive this letter. Please incorporate the required information into the August 1996 Work Plan, and present the revised version to HRMB in two hard copies, and on a 3.5" diskette compatible with Word Perfect 5.2. Your usual cooperation in submitting the necessary information promptly will expedite NMED's final determination on the subject Work Plan.

If you have any questions regarding this matter you may contact Mr. Jerry Bober or Mr. Cornelius Amindyas of my staff at (505) 827-1561.

Sincerely,

A handwritten signature in cursive script, appearing to read "Benito Garcia".

Benito Garcia, Chief
Hazardous and Radioactive Materials Bureau

cc: Robert S. (Stu) Dinwiddie, Ph.D, PM, HRMB
David Neleigh, EPA Region VI (6PD-N)
FILES: Red HAFB and READING 97
TRACK: HAFB, 5/5/97, N/A, HRMB, RE, RED 97

ATTACHMENT A

NOTICE OF DEFICIENCY: ADMINISTRATIVE COMPLETENESS AND TECHNICAL ADEQUACY OF VOLUNTARY CORRECTIVE MEASURES WORK PLAN, SWMUs 39, 127, 135, 170 and 171

HOLLOMAN AIR FORCE BASE (HAFB).

May 5, 1997

The following administrative and technical comments the Hazardous and Radioactive Materials Bureau (HRMB), New Mexico Environment Department (NMED), relate to the January 1997 Work Plan for HAFB Solid Waste Management Units (SWMUs) 39, 127, 135, 170 and 171.

The language in bold print enclosed within parentheses is quoted directly from the text of the January 1997 document. HRMB's comments follow the quotations.

ITEM #:

1. Section 1.2, Page 1-4, second paragraph, 6th and 8th sentences. **(A Field Sampling Plan, normally addressed in Section 7 for hazardous waste activities, is not required for this work plan."... "The Quality Assurance Project plan (QAPP), normally addressed in section 9 for hazardous waste activities is not required for this work plan.")**

Explain why a Field Sampling Plan and a QAPP are not required in the subject Work Plan.

Provide a description of soil and vapor sampling and analysis, data collection quality assurance, and data management procedures. Include formats for documenting and tracking the data and other results of investigations. This requirement is in fulfillment of the standards contained in HAFB's August 1991 Permit, HSWA Module in Permit Condition N, Page 14, Paragraph 1(b).

2. Section 2.3, Page 2-2, third sentence. **("The nature of the contaminants has been well documented, and a thorough site investigation was performed.")**

Provide information on the impact of the surfactant used at the subject remediation sites on humans and the environmental media. Attach Material Safety Data Sheets to the response document, in order to meet the health and safety requirements contained in HAFB's August 1991 Permit, HSWA Module in Permit Condition N, Page 14, Paragraph 1(b).

3. Section 2.3, Page 2-2, third sentence. (**"The nature of the contaminants has been well documented, and a thorough site investigation was performed."**)

Provide information on the impact of the surfactant used at the subject remediation sites on humans and the environmental media. Attach Material Safety Data Sheets to the response document, in order to meet the health and safety requirements contained in HAFB's August 1991 Permit, HSWA Module in Permit Condition N, Page 14, Paragraph 1(b).

4. Section 4.3.1, Page 4-3, Paragraph 4, First sentence. (**"A field survey was previously performed to establish horizontal and vertical control of site features and to locate the biovent well."**)

Describe in detail, how HAFB plans to delineate the horizontal and vertical extent of the contaminant plume at SWMU 136 and Building 1119 Washrack Drainage Pit Area. Explain how HAFB plans to accomplish the delineation of the contaminated zone using only a single borehole (B01). In addition, explain how HAFB will characterize the nature, direction, rate, movement, and concentration of the petroleum hydrocarbon plume, as required by HAFB's August 1991 Permit, HSWA Module, Permit Condition N, Page 14, Paragraph 1(a).

5. Provide a description of the contaminant and soil chemical properties within the contaminant source area and plume migration and transformation, as required by Permit Condition C(2), Page 34 of the HSWA Module in the August 1991 Permit.

6. Section 2.2, Page 2-1, paragraph 4, second sentence. (**"Ground water was noted at 17 feet below ground surface (bgs) in soil boring 136-B01 and at 25 feet below ground surface at soil boring 136-B02, which were both installed on November 4, 1993."**)

- a) Since the depth of the water table below the ground surface at SWMUs 136 and Building 1119 Washrack Drainage Area is shallow, and ranges only from 17 feet to 25 feet bgs, explain why HAFB did not address ground water monitoring in the subject Work Plan.

- b) Provide information on methods of ground water monitoring that HAFB will use to characterize the hydrocarbon plumes of contamination at the subject sites. Discuss monitor well design, number, placement, drilling methods, well construction, groundwater potentiometrics, and monitor well sample collection. Further, include the following

information as required by Permit Condition C(1), Page 34 of the HSWA Module in the August 1991 Permit:

- i. a description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the facility;
 - ii. the horizontal and vertical direction of contamination movement;
 - iii. the velocity of contaminant movement;
 - iv. the horizontal and vertical concentrations of any 40 CFR 264 Appendix IX constituents;
 - v. an evaluation of factors influencing the plume movement; and
 - vi. an extrapolation of future contaminant movement.
7. Section 4.3.6, Page 4-5, Paragraph 4, 4th sentence. (**" The performance of the bioventing will be monitored during operations to verify continuing bioremediation of the subsurface contamination system efficiency."**)

Provide a detailed account of how the progress of the bioventing system and its performance will be monitored, and how the following parameters will be measured: i.e., flow-balancing, flow and pressure measurements, carbon dioxide measurements, oxygen measurements, and volatile organic compound (VOC) concentration readings. Explain how the data obtained from these measurements will be interpreted in the light of the remediation process.

8. The remedial progress of bioventing systems is known to exhibit asymptotic behavior with respect to VOC, oxygen, and carbon dioxide concentrations in extracted vapors. What measures does HAFB plan to take, in order to curb this asymptotic behavior, and to increase the effectiveness of bioventing at SWMU 136 and Building 1119 Washrack Drainage Pit Area?
9. Section 4.3, Page 4-6, Paragraph 3, second sentence. (**"If bioventing continues beyond the first year, sampling will probably be conducted on a quarterly or biannual cycle until it can be confirmed that cleanup goals have been achieved."**)

How will HAFB use confirmatory drilling and soil vapor sampling and analysis in the final stage to determine that the subject sites have been remediated, and that no further action is necessary?